

IN THE CLAIMS:

1-14 (cancelled)

Claim 15 has been amended as follows:

- 15 (Currently amended) A magnetic resonance tomography
5 device comprising:
a toroidal magnet shell having a longitudinal axis and surrounding and
defining an interior cylindrical volume radially centered with
respect to said longitudinal axis;
a similarly toroidal magnet body disposed in said interior volume;
10 an encapsulation cylinder ~~cylinder~~, defining a cylindrical surface of
said cylindrical volume;
a switchable gradient coil system disposed between said cylindrical
surface and said magnet body; and
a capsule completely enclosing a radial outer surface of said magnet
15 shell and connected to said encapsulation cylinder with an
acoustically sealed connection for preventing acoustic
vibrations, generated during switching of said switchable
gradient coil system and transmitted to said magnet shell, from
penetrating into said radial outer surface, said capsule
20 comprising a three-layer system having an outermost cover
layer, a center layer comprising a full foam layer, and an inner
layer comprising a partial foam layer containing foam elements
in a form selected from the group consisting of foam patches
and foam strips.
25 16. (Previously presented) A magnetic resonance tomography
device as claimed in claim 15 wherein said cover layer has a high mass per
unit area.
17. (Previously presented) A magnetic resonance tomography
device as claimed in claim 15 wherein said three-layer system has a
30 thickness, and wherein said full foam layer comprises approximately two
thirds of said thickness and wherein said partial foam layer comprises
approximately one third of said thickness.

18. (Previously presented) A magnetic resonance tomography device as claimed in claim 15 wherein said partial foam layer has a surface fill coefficient in a range between 15% and 25% foam.

5 19. (Previously presented) A magnetic resonance tomography device as claimed in claim 15 wherein said foam elements each have a width of approximately 5 cm.

20. (Previously presented) A magnetic resonance tomography device as claimed in claim 15 wherein said capsule comprises cutouts at a plurality of locations therein.

10 21. (Previously presented) A magnetic resonance tomography device as claimed in claim 20 wherein each cutout comprises an air bridge formed by foam strips with graduated offset teeth forming a labyrinth, through which air can penetrate but which attenuates acoustic vibration.

15 22. (Previously presented) A magnetic resonance tomography device as claimed in claim 15 comprising a cylindrical RF resonator disposed in a center of said encapsulation cylinder, and comprising cylindrical carrier tube extension pieces giving said RF resonator a longitudinal length that is greater than a longitudinal length of said gradient coil system, and comprising tongues disposed at said extension pieces.

20 23. (Previously presented) A magnetic resonance tomography device as claimed in claim 22 wherein said capsule is flange-mounted with an acoustically sealed connection on said tongues and said extension pieces.

25 24. (Previously presented) A magnetic resonance tomography device as claimed in claim 22 wherein said extension pieces expand in a tapered manner at a front of said encapsulation cylinder.

25. (Previously presented) A magnetic resonance tomography device as claimed in claim 22 comprising reinforcing rings disposed at outer ends of said tongues.

30 26. (Previously presented) A magnetic resonance tomography device as claimed in claim 22 comprising additional reinforcement at said tongues.

27. (Previously presented) A magnetic resonance tomography device as claimed in claim 26 wherein said additional reinforcement comprises rails.

Claim 28 has been amended as follows:

5 28. (Currently amended) A magnetic resonance tomography device comprising:

a toroidal magnet shell having a longitudinal axis and surrounding and defining an interior cylindrical volume radially centered with respect to said longitudinal axis;

10 a similarly toroidal magnet body disposed in said interior volume;
an encapsulation cylinder ~~cylinder~~, defining a cylindrical surface of said cylindrical volume;

a switchable gradient coil system disposed between said cylindrical surface and said magnet body; and

15 a capsule completely enclosing a radial outer surface of said magnet shell and connected to said encapsulation cylinder with an acoustically sealed connection for preventing acoustic vibrations, generated during switching of said switchable gradient coil system and transmitted to said magnet shell, from
20 penetrating into said radial outer surface, said capsule comprising a three-layer system comprising and outermost cover layer, a center layer comprising a partial foam layer containing foam elements in a form selected from the group consisting of foam patches and foam strips, and an innermost
25 layer comprising a full foam layer.

29. (Previously presented) A magnetic resonance tomography device as claimed in claim 28 wherein said cover layer has a high mass per unit area.

30 30. (Previously presented) A magnetic resonance tomography device as claimed in claim 28 wherein said three-layer system has a thickness, and wherein said full foam layer comprises approximately two

thirds of said thickness and wherein said partial foam layer comprises approximately one third of said thickness.

31. (Previously presented) A magnetic resonance tomography device as claimed in claim 28 wherein said partial foam layer has a surface fill
5 coefficient in a range between 15% and 25% foam.

32. (Previously presented) A magnetic resonance tomography device as claimed in claim 28 wherein said foam elements each have a width of approximately 5 cm.

33. (Previously presented) A magnetic resonance tomography
10 device as claimed in claim 28 wherein said capsule comprises cutouts at a plurality of locations therein.

34. (Previously presented) A magnetic resonance tomography device as claimed in claim 33 wherein each cutout comprises an air bridge formed by foam strips with graduated offset teeth forming a labyrinth, through
15 which air can penetrate but which attenuates acoustic vibration.

35 (Previously presented) A magnetic resonance tomography device as claimed in claim 28 comprising a cylindrical RF resonator disposed in a center of said encapsulation cylinder, and comprising cylindrical carrier tube extension pieces giving said RF resonator a longitudinal length that is
20 greater than a longitudinal length of said gradient coil system, and comprising tongues disposed at said extension pieces.

36. (Previously presented) A magnetic resonance tomography device as claimed in claim 28 wherein said capsule is flange-mounted with an acoustically sealed connection on said tongues and said extension pieces.

25 37 (Previously presented) A magnetic resonance tomography device as claimed in claim 35 wherein said extension pieces expand in a tapered manner at a front of said encapsulation cylinder.

38. (Previously presented) A magnetic resonance tomography device as claimed in claim 35 comprising reinforcing rings disposed at outer
30 ends of said tongues.

39. (Previously presented) A magnetic resonance tomography device as claimed in claim 35 comprising additional reinforcement at said tongues.

5 40. (Previously presented) A magnetic resonance tomography device as claimed in claim 39 wherein said additional reinforcement comprises rails.